



Comprehensive Bicycle Plan

City of New Bern, NC



Education, Enforcement, and Encouragement Program Recommendations

The network of bicycle facilities recommended in New Bern should be complemented by education, enforcement, and encouragement programs. When new shoulders, bike lanes, and pathways are constructed, bicyclists of all skill levels should be educated regarding how to use these facilities safely. In addition, drivers should be expected to treat bicyclists as legitimate users of the road and operate safely around bicyclists. Unsafe behavior by either bicyclists or drivers should be targeted through police enforcement. At the same time, promotional efforts — such as Bike to Work Day and developing a public bicycle map — can help advertise bicycling as a fun, healthy form of transportation and recreation in New Bern.

This section recommends programs to help support New Bern's network of bicycle facilities.

Education Programs

The City of New Bern planning and recreation and parks departments should work with law enforcement officials, local bicycle shops, local bicycle advocacy groups, educators, church organizations, public health professionals, local media, and other community groups to establish a broad-based bicycle safety education campaign. This campaign should target both bicyclists and drivers.



These education programs will allow people of all ages and bicycling abilities to become more informed about bicycle safety. They will also help drivers operate more safely around bicyclists.

Rules of the Road

The core of the New Bern bicycle safety education campaign should emphasize rules of the road for both bicyclists and drivers. A summary of these rules is provided below.

For cyclists:

- Follow the same laws that apply to motorists. Obey all traffic signals, signs, and lane markings. Always yield to pedestrians.
- Ride on the right side of the road with the flow of traffic — never against it.
- Always wear a properly fitting helmet.
- Ride predictably and defensively. Use hand signals before turning.
- Be visible. If it is necessary to ride at night, use lights, reflectors, and bright clothing.
- Avoid riding on sidewalks. If it is necessary to ride on a sidewalk, be aware of risks at intersections.



For motorists:

- Obey speed limits. Higher speeds result in greater injuries to cyclists and pedestrians.



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- Obey signs, signals, and markings. Never run red lights.
- Yield to cyclists where required. Always look for bicyclists when turning.
- Pass cyclists with care. Slow down and provide enough space when passing.
- Do not blast your horn in close proximity to cyclists.
- Look for cyclists when opening car doors.
- Watch for children.
- Watch for bicyclists riding at night.

Other Critical Safety Issues

The New Bern bicycle safety campaign should also address the following critical bicycle safety issues:

- Riding against traffic
- Riding on sidewalks

- Riding at night

All three of these behaviors can increase the risk of bicycle-motor vehicle crashes.

Riding Against Traffic — Riding against traffic, either on the sidewalk or on the roadway, is a common practice in the New Bern area. This behavior increases the risk of being involved in crashes at driveways or intersections because right-turning drivers typically only look left before they turn and do not see bicyclists approaching from the opposite direction. Informational graphics can be used by the City to illustrate this risk (see sample from a Florida campaign below).

Riding on Sidewalks — Many bicyclists ride on sidewalks because they do not feel comfortable riding on the roadway with motor vehicles. However, bicyclists on sidewalks do not approach intersections from the same areas as motor vehicle traffic, so they can be difficult for drivers to see. When cyclists choose to ride on the sidewalk, they should



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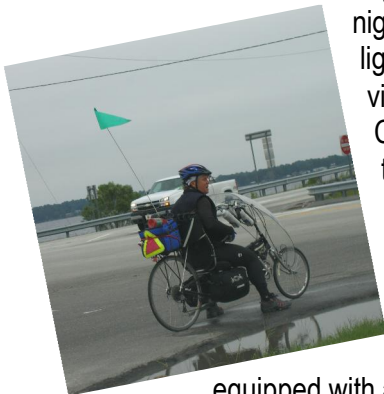


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ride in the same direction as vehicles in the adjacent roadway lanes, whenever possible. In the case where a bicyclist would need to cross a multi-lane roadway to ride in the same direction as traffic for a short distance, this crossing may be impractical and potentially less safe than riding in the opposite direction as traffic on the sidewalk. Thus, it is imperative that cyclists who chose to ride on the sidewalk in either direction be educated about the hazards associated with this practice. In general, adults should not ride on the sidewalk. Studies show that bicyclists on the sidewalk are significantly more likely to be involved in a crash than those riding on the road. A study conducted by Wachtel and Lewiston in 1994 indicated that sidewalk bicyclists are twice as likely to be involved in car-bike crashes as other bicyclists. Cyclists engaging in wrong-way sidewalk riding are about four times more likely to be involved in car-bike crashes than road cyclists.¹

Riding at Night — If possible, bicyclists should avoid riding at night. When riding at night, bicyclists must ride with lights to increase their visibility to drivers. North Carolina state law requires that bicycles be equipped with a lighted lamp that is visible up to 300 feet in front. In addition, it is required that bicycles ridden at night be equipped with a red taillight or rear reflector visible up to 200 feet in the rear. Even if a bicycle is properly fitted with reflectors and lights, motorists coming from a



¹ Wachtel, A. and Lewiston, D. Risk Factors for Bicycle-Motor Vehicle Collisions at Intersections; *ITE Journal*, September, 1994.



side street may not see the cyclist until it is too late for the driver to react.

Therefore, bicyclists must be made aware of the dangers they face in the dark. Informational posters showing sight distances for various colors of clothing and illustrating the limitations of reflectors should be distributed by the City as a part of the educational campaign.

While these critical safety issues are important for bicyclists to be aware of, drivers must also be targeted with these educational messages to increase their awareness of bicycle crash risks. Motorists should be instructed to look in both directions for bicyclists when turning at intersections, drive more slowly, and be aware of the potential for bicyclists to be riding at night.

Elements of the Safety Education Campaign

The City's broad-based education campaign should include bike rodeos, bicycle safety education programs in schools, public service announcements, and documents, such as posters, brochures, and websites.

Bike Rodeos

The New Bern Police Department currently offers bicycle rodeos by request only. The City of New Bern should offer bicycle rodeos on weekends or weekdays several times during the year. These rodeos should teach basic bicycling skills and rules of the road. City staff should partner with local law enforcement and local volunteer bicyclists to organize these events. Bicycle rodeos could be a first step toward developing a more comprehensive safety education program for local schools.





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School-Based Bicycle Safety Education

The City of New Bern should work with local elementary schools to develop a bicycle safety education program. Current school curricula devote little attention to bicycle safety. The bicycle safety education program could be offered as a part of regular physical education classes. Children in grades 3, 4, and 5 could be given hands-on bicycle safety lessons about wearing helmets, following the rules of the road, and turning and signaling. The bicycle lessons could be based on the Basics of Bicycling Curriculum that is available from NCDOT or other programs that have been implemented in states such as Maryland, Florida, and Texas. Support for the on-bike lessons could be provided by local bicyclists and law enforcement officers.



While the program should target one or two schools during its first year, it should be expanded to all elementary schools in the City.

Funding for the program could potentially be obtained through the Governor's Highway Safety Program 402 Funds or the new state Safe Routes to School program (Safe Routes to School is described in more detail in the section on Encouragement Programs). The City should also build partnerships with local school systems and public and private schools to obtain additional financial support and educational experience for the program.

Public Service Announcements

Public service messages on the television and radio can be created to inform the public about proper bike riding techniques, the meaning of signed route and "Share the Road" signs, and driver courtesy. The City of New Bern should develop and broadcast public service messages to support the bicycle safety education campaign.

Other Educational Materials

Another component of the City's educational campaign should be to distribute brochures, make posters, and set-up web pages with graphics about bicycle safety to increase awareness of these dangerous situations. These materials can be provided at local businesses, schools, and public buildings.

State Support for Bicycle Education

The City of New Bern should take advantage of state support for bicycle education. The NCDOT Division of Bicycle and Pedestrian Transportation offers educational materials for children to learn the basics of bicycling, safety, and how to follow the rules of the road. Teachers or parents can order posters, pamphlets and brochures, and educational videos online or by calling the Division.

Several sections of the NCDOT Bicycle Policy also support the development of bicycle programs in New Bern:

- State, county, and local law enforcement agencies are encouraged to provide special training for law enforcement personnel with regard to bicycling.
- Education of both motorists and bicyclists on bicycle rights and responsibilities shall be an integral part of the NCDOT Bicycle Program.





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- School systems are encouraged to conduct bicycle safety education programs as a part of and in addition to the driver's education program, to the maximum extent practicable.
- The Division of Motor Vehicles is urged to include bicycle safety and user information in its motor vehicle safety publications.

Enforcement Programs

Critical bicycle safety issues identified during the planning process included motor vehicle operators' lack of respect for bicyclists as legitimate users of the roadways and bicyclists riding in an illegal and/or unsafe manner. While education programs should be offered to both motorists and bicyclists, they should be complemented by well-publicized and focused enforcement operations.



The City of New Bern should work with the local Sheriff's Department, Craven County, and the North Carolina Highway Patrol to improve bicyclist safety by establishing a countywide, coordinated bicycle enforcement campaign. This enforcement effort should emphasize that bicycle safety is a shared responsibility between bicyclists and motorists.

In developing this program, it is important to understand state laws related to bicycling.

State Bicycle Statutes

Below are several critical aspects of the North Carolina statute bicycle-related laws:

Laws Addressing Bicyclists

- In North Carolina, the bicycle has the legal status of a vehicle. This means that bicyclists have full rights and responsibilities on the roadway and are subject to the regulations governing the operation of a motor vehicle. Bicyclists also ride on the same side of the road as motor vehicles and adhere to all signals and signs.
- Bicyclists must signal left and right turns by way of hand signals.
- Bicyclists are required to use both a front lamp and rear reflector when riding at night.
- All bicyclists under age 16 must wear a bicycle helmet on public roads, paths, and rights-of-way.
- Bicycles that travel under the posted speed limit shall ride in the right-hand lane or as close as practicable to the right-hand curb or edge of the highway, except when overtaking and passing another vehicle, avoiding a dangerous obstruction, riding on a one-way street, or when preparing for a left turn.

Laws Addressing Drivers

- The driver of a vehicle overtaking a bicyclist shall pass at least two feet to the left of the bicyclist, and shall not drive to the right side of the roadway until safely clear of the bicyclist.
- The driver of a motor vehicle shall not follow a bicyclist more closely than is reasonable and prudent, having due regard for the speed of such vehicles and the traffic upon and the condition of the highway.





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Targeted Behaviors

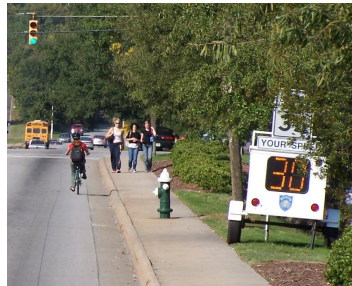
The purpose of the enforcement campaign is to improve safety for bicyclists by upholding the laws related to bicycling. Therefore, the enforcement should target the following bicycle and driver behaviors:

Bicycle Behaviors

- Violating traffic signals
- Riding against traffic on the roadway
- Riding at night without lights
- Failure to signal turns
- Not wearing a helmet

Driver Behaviors

- Not allowing enough space when passing cyclists
- Not yielding to bicyclists when turning
- Speeding



Bicycle Registration and Licensing Program

The City of New Bern should also consider a bicycle registration and/or licensing program as a part of the enforcement effort to improve bicycle safety. This program would require bicyclists to register and affix a license tag to their bicycles. The primary goal of this program would be to improve safety for bicyclists, particularly children, who may be unresponsive after an accident and are not able to be identified quickly. A bicycle license tag may enable rescue personnel to more quickly determine an accident victim's identity, leading to improved decision-making for emergency medical treatment. A

secondary goal of a bicycle licensing program is to deter bicycle theft and to increase the opportunity for stolen bicycles to be returned to their proper owners.

Encouragement Programs

The City of New Bern should establish a set of programs to promote bicycling and encourage residents to use the new bicycle facilities that are constructed.

Safe Routes to School

The City of New Bern should work with local schools and bicycle advocacy groups to apply for state funding for a Safe Routes to School Program. The program should combine bicycle and pedestrian facility improvements in the areas around schools with bicycle and pedestrian safety education and encouragement programs to increase the number of students walking and bicycling to school.

The Safe Routes to Schools program should be offered at two pilot schools in the first year after this plan is adopted and expand to additional schools in the future. Note that the 2005 SAFETEA-LU federal transportation bill has apportioned \$2.36 million in funding for Safe Routes to Schools Programs in North

Carolina in Fiscal Year 2006. NCDOT has a new Safe Routes to School Program Coordinator who can provide advice and help

guide the program in New Bern. For more information, see

<http://www.ncdot.org/programs/safeRoutes/>.



Helmet Promotions

The Child Bicycle Safety Act was passed in 2001. As a result of this bill, the NCDOT



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awarded over \$300,000 to 240 local police and sheriff's departments and the Highway Patrol. The purpose of these funds was to purchase bicycle helmets for use in safety awareness programs in the communities in which funding was awarded. Each law enforcement agency applied for a grant worth up to \$2,000 each based on the need, community size, and available funding. New Bern received a grant of \$1,400 which was used for helmets given to children at local bicycle safety events. More information on this program can be found at the following website:

http://www.ncdot.org/transit/bicycle/safety/programs_initiatives/helmets_helmet.html

More information on helmet initiatives can be found online at

<http://www.helmets.org/toolkit.htm>.

Walk and Bicycle to School Day

The City of New Bern should work with local schools to increase participation in International Walk and Bicycle to School Day. Walk to school days have been instituted at many schools throughout North Carolina over the past decade. They increase awareness of bicycling and walking as fun, healthy transportation choices that can reduce automobile congestion and pollution near schools. Even a walk to school day can encourage the use of non-motorized transportation and as a result promote bicycling.

Other School-Based Programs

The City should also collaborate with schools to offer activities, such as organizing a "bicycling school bus" or "bicycling train" (a group of students meeting at a specific location and bicycling to school as a group), bicycle scavenger hunt through a Ride 'n' Seek maze, setting up a system for students to earn points and prizes at school through



Frequent Rider Miles, and offering bicycle helmet give-aways to classes that have the highest number of students bicycling to school. Bicycle advocacy groups may also be able to assist with these programs.

For additional ideas, see the website www.saferoutestoschools.org.



Public Bicycle Map

As a product of this study, the City of New Bern and other public and private organizations are working together to develop a public bicycle map for the New Bern area. These maps can be displayed at public buildings and private businesses and can be made available for use by the general public.



Bike Mentor Program

The City should work with local bicycle advocates and bike shop owners to establish a bike mentor program. This program matches adults who would like to learn more about how to bicycle for commuting with a volunteer who can show them the best route to their work as well as how to bicycle in traffic, in the dark, or in the rain. It is





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designed to be a fun and easy way to get adults more comfortable with and excited about bicycling for transportation purposes.

Bike to Work Week

The City of New Bern should work with local bike shops and bicycle advocates to establish a “Bike to Work” week. The week may include activities such as a competition between local employers to see which can have the greatest percentage of employees bicycle at least one day during the week, a bicycle or bicycle helmet give-away, or a bicycle rally in Downtown New Bern on Friday.

The City may want to designate one week in May as “Bike to Work” week because the month of May is typically considered Bicycle Month in the U.S. In fact, May 2006 marks the 50th Annual National Bike Month™ designated by the League of American Bicyclists.



encouraging bicycling for transportation and recreation.

Bicycle Friendly Community

Within five years of adopting this plan, the City of New Bern should apply to become a Bicycle Friendly Community. The Bicycle Friendly Communities Campaign is administered by the League of American Bicyclists. This program encourages communities that feel they have made steps towards becoming bicycle-friendly to apply for an award recognizing their efforts. Cary and Carrboro are two cities in the region that have been awarded this honor previously. A Bicycle Friendly Community is one that provides safe accommodations for bicyclists while also

Health Initiatives

The New Bern city planning staff should partner with Craven Regional Medical Center or other local advocacy groups to sponsor a health-based initiative. This campaign can include “be active” programs that encourage healthy exercise and “eat right” programs that promote healthy lifestyles. Bicycling is a natural fit to be included as a part of this initiative. For more information, see the following website: www.beactivenc.org.



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